

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Joakim Bergstrom, et al. § Group Art Unit: 2416  
Application No. 10/595,288 § § Examiner: Jiang, Charles C.  
Filed: 12/12/2006 § § Confirmation No: 6880  
§  
Attorney Docket No: P18610-US1  
Customer No.: 27045

For: MBMS Acknowledgements on RACH

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**APPEAL BRIEF SUBMITTED UNDER 35 U.S.C. §134**

This Appeal Brief is submitted to appeal the decision of the Primary Examiner, set forth in the non-final Official Action dated March 24, 2010, rejecting claims 8, 10 and 12-14.

A prior appeal was filed on December 22, 2009, to appeal the decision of the Primary Examiner set forth in a Final Office Action dated July 23, 2009, finally rejecting claims 8, 10 and 12-14, and an Advisory Action issued on September 29, 2009, maintaining the claim rejections set out in that Final Office Action. Rather than answer that appeal, the Examiner re-opened prosecution and issued a new basis of rejection in the Non-Final Office Action dated March 29, 2010; the Applicants appeal the new basis of rejection, which merely substitutes a new secondary reference for one previously asserted.

**Whereas fees for a Notice of Appeal fee and Appeal Brief were paid for the previously-filed appeal, which the Examiner did not answer, no new fees are due.**

### Real Party in Interest

The real party in interest, by assignment, is: Telefonaktiebolaget LM Ericsson (publ)  
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Stockholm, Sweden

### Related Appeals and Interferences

A prior appeal was filed on December 22, 2009, to appeal the decision of the Primary Examiner set forth in a Final Office Action dated July 23, 2009, finally rejecting claims 8, 10 and 12-14, and an Advisory Action issued on September 29, 2009, maintaining the claim rejections set out in that Final Office Action. Rather than answer that appeal, the Examiner re-opened prosecution and issued a new basis of rejection in an office action dated March 24, 2010; the Applicants now appeal the new basis of rejection. A copy of the prior Appeal Brief is submitted herewith in the Related Proceedings Appendix so that the Board can be apprised of the merits, *vel non*, of the Examiner's prior claim rejections.

### Status of Claims

Claims 1-7, 9 and 11 were previously cancelled and are not appealed. Claims 8, 10 and 12-14 remain pending, each of which are finally rejected and form the basis for this appeal.

### Status of Amendments

The claims set out in the Claims Appendix include all entered amendments. No amendment has been filed subsequent to the final rejection.

### Summary of Claimed Subject Matter

<b>Claim 8</b>	<b>Specification Reference</b>
8. A method for avoiding collisions on a random access channel of a telecommunication system providing Multimedia Broadcast/Multicast Services (MBMS) to a plurality of subscribing user equipments, said method comprising the steps of:	Page 5, line 27, <i>et seq.</i>

dividing an MBMS session into a first period for transmission of MBMS data to user equipments and a subsequent second period for receiving feedback information, by determining a delay time period for each subscribing user equipment after the lapse of which said user equipment starts transmission of feedback information on the random access channel for acknowledgement of successfully received MBMS data portions; and	Page 6, line 13, <i>et seq.</i>  Page 9, line 20, <i>et seq.</i>
selecting a preamble signature for use on a sub-channel of a random access channel for the subscribing user equipments; then,	Page 9, line 27, <i>et seq.</i>
forwarding said respective delay time periods and preamble signature to the user equipments; then	Page 9, line 28, <i>et seq.</i>
transmitting one or more MBMS data portions on a downlink channel to the group of subscribing user equipments; and	Page 10, line 1, <i>et seq.</i>
receiving feedback information from the plurality of user equipments.	Page 10, line 3, <i>et seq.</i>

Claim 10	Specification Reference
10. A method in a user equipment of a telecommunication system subscribing to a Multimedia Broadcast/Multicast Service (MBMS), said method comprising the steps of:	Page 5, line 27, <i>et seq.</i>
determining a delay time period based on dividing an MBMS session into a first period for transmission of MBMS data to the user equipment and a subsequent second period for transmitting feedback information by the user equipment;	Page 8, line 16, <i>et seq.</i>
using a preamble signature on a sub-channel of a random access channel for transmission of said feedback information by the user equipment; and	Page 9, line 8, <i>et seq.</i>
transmitting by the user equipment, after the lapse of said delay time period, feedback information on the random access channel using the preamble signature for acknowledgement of successfully received MBMS-data portions.	Page 9, line 5, <i>et seq.</i>

### **Grounds of Rejection to be Reviewed on Appeal**

- 1.) Whether claims 8, 13 and 14 are unpatentable, under 35 U.S. C. §103(a), over Chuah I (U.S. Patent Publication No. 2004/0032877) in view of Willekes (U.S. Patent Publication No.2002/0075824) and Jurgensen, *et al.* (U.S. Patent No. 6,574,212);
- 2.) Whether claim 10 is unpatentable, under 35 U.S. C. §103(a), over Chuah II (U.S. Patent No. 6,674,765) in view of Willekes and Jurgensen; and,
- 3.) Whether claim 12 is unpatentable, under 35 U.S. C. §103(a), over Chuah I in view of Willekes, Jurgensen and Osawa (U.S. Patent No. 5,621,732).

### **Arguments**

- 1.) **Claims 8, 13 and 14 are patentable over Chuah I in view of Willekes and Jurgensen**

The Examiner has now rejected claims 8, 13 and 14 as being unpatentable over Chuah I (U.S. Patent Publication No. 2004/0032877) in view of Willekes (U.S. Patent Publication No.2002/0075824) and Jurgensen, *et al.* (U.S. Patent No. 6,574,212). In rejecting claim 8, the Examiner acknowledged that Chuah I and Willekes fail to teach selecting a preamble signature for use on a sub-channel of a random access channel for subscribing user equipments. (Office Action dated March 24, 2010; Paragraph 8). To overcome that deficiency, the Examiner previously looked to the teachings of Chuah II, but has now substituted the teachings of Jurgensen, stating that:

“Jurgensen teaches . . . and selecting a preamble signature for use on a sub-channel of a random access channel for the subscribing user equipments (Jurgensen, Fig. 6, Col 6, Lines 47 to Col 7, Lines 37); . . . and preamble signature (Previously Discussed) . . .”

The Applicants do not understand what the Examiner means in asserting that the preamble signature was “Previously Discussed,” since the Examiner did not previously discuss the teachings of Jurgensen with respect to the rejection of claim 8. In any case, the undersigned has reviewed the referenced portions of Jurgensen, however, and does not see what the Examiner asserts is taught at the referenced locations. Although the teachings of Jurgensen does include the technical element of preamble signatures, there appears to be no teaching therein of selecting a preamble signature “for use on a

sub-channel of a random access channel for subscribing user equipments," as recited in claim 8. In fact, a keyword search of the complete reference fails to yield even a single occurrence of "sub," much less "sub-channel." Accordingly, it is simply not possible that Jurgensen teaches "selecting a preamble signature for use on a sub-channel of a random access channel."

The limitation of "for use on a sub-channel of a random access channel for the subscribing user equipments" is tied to "selecting a preamble signature." Furthermore, once such preamble signature for use on a sub-channel of a random access channel for subscribing user equipments is selected, it is forwarded, along with a delay time period determined in a prior step, to each user equipment. The combination of those functions, and others, in claim 8, is for the purpose of avoiding collisions on a random access channel of a telecommunication system providing MBMS services to a plurality of subscribing user equipments. The Examiner has not pointed to any such purpose in the individual references, nor in the combination thereof; it appears that the Examiner has, again, merely picked and chosen similar or identical technical elements from the cited references, without any regard to the functions performed by those elements, either individually or in combination. The Examiner acknowledges in the Office Action dated March 24, 2010, from which this appeal is taken, that the previously-asserted combination of references (Chuah I, Willekes and Chuah II) does not teach the claimed invention.<sup>1</sup> The only difference in the present basis of rejection is that the Examiner has now asserted the teachings of Jurgensen in place of the teachings of Chuah II with respect to the claim limitation of "selecting a preamble signature for use on a sub-channel of a random access channel for subscribing user equipments." As established *supra*, however, Jurgensen fails to teach that which the Examiner asserts. Thus, the Examiner has again not established a *prima facie* case of obviousness of claim 8. Whereas claims 13 and 14 are dependent from claim 8, and include the limitations thereof, the Examiner has also not established a *prima facie* case of obviousness of those claims.

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<sup>1</sup> The Examiner states that "Applicant's arguments, see Page 4, filed 12/22/2009, with respect to the rejection of claims 8, 10, 12-14 under 35 USC 103(a) have been fully considered and are persuasive."

**2.) Claim 10 is patentable over Chuah II in view of Willekes and Jurgensen**

As established *supra* with respect to claim 8, there is no teaching in Jurgensen of selecting a preamble signature "for use on a sub-channel of a random access channel for subscribing user equipments," as also recited in claim 10. Therefore, the Examiner has not established a *prima facie* case of obviousness for claim 10 in view of Chuah II, Willekes and Jurgensen.

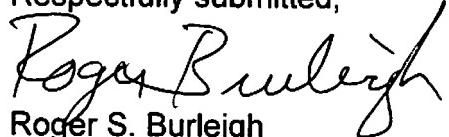
**3.) Claim 12 is patentable over Chuah I in view of Willekes, Jurgensen and Osawa**

As established *supra* with respect to claim 8, there is no teaching in Jurgensen of selecting a preamble signature "for use on a sub-channel of a random access channel for subscribing user equipments." Therefore, whereas claim 12 is dependent from claim 8, and includes the limitations thereof, the Examiner has not established a *prima facie* case of obviousness for claim 12 in view of the combination of references.

**CONCLUSION**

The claims currently pending in the application are patentable over the cited references and the Applicants request that the Examiner's claim rejections be reversed and the application be remanded for further prosecution.

Respectfully submitted,

  
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Ericsson Patent Counsel

Date: August 24, 2010

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## CLAIMS APPENDIX

### 1-7. (Cancelled)

8. (Previously Presented) A method for avoiding collisions on a random access channel of a telecommunication system providing Multimedia Broadcast/Multicast Services (MBMS) to a plurality of subscribing user equipments, said method comprising the steps of:

dividing an MBMS session into a first period for transmission of MBMS data to user equipments and a subsequent second period for receiving feedback information, by determining a delay time period for each subscribing user equipment after the lapse of which said user equipment starts transmission of feedback information on the random access channel for acknowledgement of successfully received MBMS data portions; and

selecting a preamble signature for use on a sub-channel of a random access channel for the subscribing user equipments; then,

forwarding said respective delay time periods and preamble signature to the user equipments; then

transmitting one or more MBMS data portions on a downlink channel to the group of subscribing user equipments; and

receiving feedback information from the plurality of user equipments.

### 9. (Cancelled)

10. (Previously Presented) A method in a user equipment of a telecommunication system subscribing to a Multimedia Broadcast/Multicast Service (MBMS), said method comprising the steps of:

determining a delay time period based on dividing an MBMS session into a first period for transmission of MBMS data to the user equipment and a subsequent second period for transmitting feedback information by the user equipment;

using a preamble signature on a sub-channel of a random access channel for transmission of said feedback information by the user equipment; and

transmitting by the user equipment, after the lapse of said delay time period, feedback information on the random access channel using the preamble signature for acknowledgement of successfully received MBMS-data portions.

11. (Cancelled)

12. (Previously Presented) The method according to claim 8, wherein said delay time period starts counting at a user equipment from the successful reception of said one or more MBMS-data portions.

13. (Previously Presented) The method according to claim 8, wherein said delay time period is calculated from a unique identifier of the user equipment.

14. (Previously Presented) The method according to claim 8, wherein said delay time period constitutes a randomly determined value within a given time period.

\* \* \*

**EVIDENCE APPENDIX**

None.

## **RELATED PROCEEDINGS APPENDIX**

This Appendix presents a copy of the prior Appeal Brief (without Appendices), submitted on December 22, 2009.

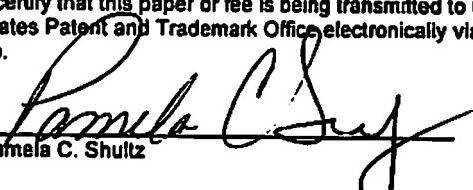
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Application No. 10/595,288 § Examiner: Jiang, Charles C.  
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 Name: Pamela C. Shultz	

**APPEAL BRIEF SUBMITTED UNDER 35 U.S.C. §134**

This Appeal Brief is submitted to appeal the decision of the Primary Examiner, set forth in Final Official Action dated July 23, 2009, finally rejecting claims 8, 10 and 12-14, and the Advisory Action, dated September 29, 2009, maintaining the claim rejections.

The Commissioner is hereby authorized to charge any appropriate fees under 37 C.F.R. §41.20(b)(2), and to credit any overpayment, to Deposit Account No. 50-1379.

**Real Party in Interest**

The real party in interest, by assignment, is: Telefonaktiebolaget LM Ericsson (publ)  
SE-164 83  
Stockholm, Sweden

### Related Appeals and Interferences

None.

### Status of Claims

Claims 1-7, 9 and 11 were previously cancelled and are not appealed. Claims 8, 10 and 12-14 remain pending, each of which are finally rejected and form the basis for this appeal. A copy of claims 8, 10 and 12-14, as amended to date, are submitted herewith in the Claims Appendix.

### Status of Amendments

The claims set out in the Claims Appendix include all entered amendments. No amendment has been filed subsequent to the final rejection.

### Summary of Claimed Subject Matter

<b>Claim 8</b>	<b>Specification Reference</b>
8. A method for avoiding collisions on a random access channel of a telecommunication system providing Multimedia Broadcast/Multicast Services (MBMS) to a plurality of subscribing user equipments, said method comprising the steps of:	Page 5, line 27, et seq.
dividing an MBMS session into a first period for transmission of MBMS data to user equipments and a subsequent second period for receiving feedback information, by determining a delay time period for each subscribing user equipment after the lapse of which said user equipment starts transmission of feedback information on the random access channel for acknowledgement of successfully received MBMS data portions; and	Page 6, line 13, et seq. Page 9, line 20, et seq.
selecting a preamble signature for use on a sub-channel of a random access channel for the subscribing user equipments; then,	Page 9, line 27, et seq.
forwarding said respective delay time periods and preamble signature to the user equipments; then	Page 9, line 28, et seq.
transmitting one or more MBMS data	Page 10, line 1, et seq.

portions on a downlink channel to the group of subscribing user equipments; and	
receiving feedback information from the plurality of user equipments.	Page 10, line 3, et seq.

Claim 10	Specification Reference
10. A method in a user equipment of a telecommunication system subscribing to a Multimedia Broadcast/Multicast Service (MBMS), said method comprising the steps of:	Page 5, line 27, et seq.
determining a delay time period based on dividing an MBMS session into a first period for transmission of MBMS data to the user equipment and a subsequent second period for transmitting feedback information by the user equipment;	Page 8, line 16, et seq.
using a preamble signature on a sub-channel of a random access channel for transmission of said feedback information by the user equipment; and	Page 9, line 8, et seq.
transmitting by the user equipment, after the lapse of said delay time period, feedback information on the random access channel using the preamble signature for acknowledgement of successfully received MBMS-data portions.	Page 9, line 5, et seq.

#### Grounds of Rejection to be Reviewed on Appeal

- 1.) Whether claims 8 and 13-14 are unpatentable, under 35 U.S. C. §103(a), over Chuah I (U.S. Patent Publication No. 2004/0032877) in view of Willekes (U.S. Patent Publication No.2002/0075824) and Chuah II (U.S. Patent No. 6,674,765);
- 2.) Whether claim 10 is unpatentable, under 35 U.S. C. §103(a), over Chuah II in view of Willekes; and,
- 3.) Whether claim 12 is unpatentable, under 35 U.S. C. §103(a), over Chuah I in view of Willekes, Chuah II and Osawa (U.S. Patent No. 5,621,732).

## Arguments

### 1.) Claims 8 and 13-14 are patentable over Chuah I in view of Willekes and Chuah II

The Examiner rejected claims 8 and 13-14 as being unpatentable over Chuah I (U.S. Patent Publication No. 2004/0032877) in view of Willekes (U.S. Patent Publication No.2002/0075824) and Chuah II (U.S. Patent No. 6,674,765). In rejecting claim 8, the Examiner acknowledged that Chuah I and Willekes fail to teach selecting a preamble signature for use on a sub-channel of a random access channel for subscribing user equipments. To overcome that deficiency, the Examiner looks to the teachings of Chuah II, asserting that it teaches:

"selecting a preamble signature for use on a sub-channel of a random access channel for the subscribing user equipments (Chuah, USPN 6,674,765, Fig. 8, Element 804, Col. 12, Lines 37-50, Chuah ('765) directed toward use of a sub-channel of a random access channel, see Col 6, Lines 55-67)"

The undersigned has reviewed the referenced portions of Chuah II, however, and does not see what the Examiner asserts is taught at the referenced locations. Although element 804 in Figure 8 illustrates and is described as a step of selecting a preamble, there is no teaching at column 6, lines 55-67, of selecting a preamble signature "for use on a sub-channel of a random access channel for subscribing user equipments," as recited in claim 8. Therefore, the Examiner has not established a *prima facie* case of obviousness for that claim. Thus, whereas claims 12-14 are dependent from claim 8, and include the limitations thereof, they are also not obvious in view of Chuah I, Willekes and Chuah II.

In the Advisory Action, in response to Applicants' argument that the referenced portion of Chuah II fails to disclose the foregoing claim limitation, the Examiner merely asserts that:

"a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim."

In addition, Chuah [II] teaches [the] limitation . . . The invention of Chuah [II] is directed towards random access channel optimization in a multi subscriber environment. Thus, the applicant's arguments with respect to [claim 8 is] not persuasive."

The Examiner misstates both the law and the particulars of the claimed invention. The limitation of "for use on a sub-channel of a random access channel for the subscribing user equipments" is tied to "selecting a preamble signature." Furthermore, once such preamble signature for use on a sub-channel of a random access channel for subscribing user equipments is selected, it is forwarded, along with a delay time periods determined in a prior step, to the user equipments. The combination of those functions, and others, in claim 8, is for the purpose of avoiding collisions on a random access channel of a telecommunication system providing MBMS services to a plurality of subscribing user equipments. The Examiner has not pointed to any such purpose in the individual references, nor in the combination thereof. The Examiner is merely picking and choosing similar or identical technical elements from the cited references, without any regard to the functions performed by those elements, either individually or in combination. Thus, the Examiner has not established a *prima facie* case of obviousness of claim 8. Whereas claims 12-14 are dependent from claim 8, and include the limitations thereof, they are also not obvious in view of the cited references.

**2.) Claim 10 is patentable over Chuah II in view of Willekes**

As established *supra* with respect to claim 8, there is no teaching in Chuah II of selecting a preamble signature "for use on a sub-channel of a random access channel for subscribing user equipments," as also recited in claim 10. The Examiner has not pointed to any teaching in Willekes to overcome that deficiency. Therefore, the Examiner has not established a *prima facie* case of obviousness for claim 10 in view of Chuah II and Willekes.

**3.) Claim 12 is patentable over Chuah I in view of Willekes, Chuah II and Osawa**

As established *supra* with respect to claim 8, there is no teaching in Chuah II of selecting a preamble signature "for use on a sub-channel of a random access channel for subscribing user equipments." The Examiner has not pointed to any teaching in Willekes, Chuah or Osawa to overcome that deficiency. Therefore, the Examiner has not established a *prima facie* case of obviousness for claim 12 in view of the combination of references.

**CONCLUSION**

The claims currently pending in the application are patentable over the cited references and the Applicants request that the Examiner's claim rejections be reversed and the application be remanded for further prosecution.

Respectfully submitted,  
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## CLAIMS APPENDIX

### 1-7. (Cancelled)

8. (Previously Presented) A method for avoiding collisions on a random access channel of a telecommunication system providing Multimedia Broadcast/Multicast Services (MBMS) to a plurality of subscribing user equipments, said method comprising the steps of:

dividing an MBMS session into a first period for transmission of MBMS data to user equipments and a subsequent second period for receiving feedback information, by determining a delay time period for each subscribing user equipment after the lapse of which said user equipment starts transmission of feedback information on the random access channel for acknowledgement of successfully received MBMS data portions; and

selecting a preamble signature for use on a sub-channel of a random access channel for the subscribing user equipments; then,

forwarding said respective delay time periods and preamble signature to the user equipments; then

transmitting one or more MBMS data portions on a downlink channel to the group of subscribing user equipments; and

receiving feedback information from the plurality of user equipments.

### 9. (Canceled)

10. (Previously Presented) A method in a user equipment of a telecommunication system subscribing to a Multimedia Broadcast/Multicast Service (MBMS), said method comprising the steps of:

determining a delay time period based on dividing an MBMS session into a first period for transmission of MBMS data to the user equipment and a subsequent second period for transmitting feedback information by the user equipment;

using a preamble signature on a sub-channel of a random access channel for transmission of said feedback information by the user equipment; and

transmitting by the user equipment, after the lapse of said delay time period, feedback information on the random access channel using the preamble signature for acknowledgement of successfully received MBMS-data portions.

11. (Cancelled)

12. (Previously Presented) The method according to claim 8, wherein said delay time period starts counting at a user equipment from the successful reception of said one or more MBMS-data portions.

13. (Previously Presented) The method according to claim 8, wherein said delay time period is calculated from a unique identifier of the user equipment.

14. (Previously Presented) The method according to claim 8, wherein said delay time period constitutes a randomly determined value within a given time period.

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